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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte LANCE W. RUSSELL

Appeal 2008-005949
Application 09/888,544
Technology Center 2400

Decided: August 27, 2009

Before JAMES D. THOMAS, ST. JOHN COURTENAY III, and
DEBRA K. STEPHENS, *Administrative Patent Judges*.

THOMAS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

This is an appeal under 35 U.S.C. § 134(a) from the Examiner's twice rejection of claims 1, 2, 4 through 6, 12, 13, 19, and 21 through 27. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

Invention

Routing meta data is provided along with conventional file access meta data in response to a data file access request so that client file systems may optimize the selection of routes over which a file is accessed.

(Abstract, Spec. 14; Figs. 1, 3-4).

Representative Claim

1. A method of accessing a data file in a distributed computing environment, comprising:

in response to a request from a client site for access to a data file stored in one or more physical storage systems at a source site, sending from the source site to the client site physical address meta data including physical addresses of one or more logical blocks of the data file in the one or more physical storage systems, and routing meta data comprising one or more node addresses along one or more network routes between the client site and the source site.

Prior Art and Examiner's Rejections

The Examiner relies on the following references as evidence of unpatentability:

Kato	6,223,249 B1	Apr. 24, 2001
Koyanagi	2001/0013067 A1	Aug. 9, 2001 (filed Feb. 2, 2001)
Vahalia	2005/0251500 A1	Nov. 10, 2005 (effective filing date Mar. 3, 1999)

All claims on appeal, claims 1, 2, 4 through 6, 12, 13, 19, and 21 through 27, stand rejected under 35 U.S.C. § 103. As evidence of obviousness as to claims 1, 2, 4 through 6, 12, 13, 19, 23, 24, 26, and 27, the Examiner relies upon Vahalia in view of Koyanagi. In a second stated rejection as to claims 21, 22, and 25, the Examiner adds Kato to the initial combination of references.

Claim Groupings

Because independent claims 1, 12, and 19 contain substantially correlated limitations, we and Appellant consider independent claim 1 as representative of them all. The additional arguments presented as to independent claim 19 are considered separately. Lastly, as to the second stated rejection, pages 17 and 18 of the Brief rely for patentability upon the arguments presented with respect to the subject matter in accordance with the first stated rejection of representative independent claim 1 on appeal.

ISSUE

Has Appellant shown that the Examiner erred in finding that the collective teachings of Vahalia and Koyanagi teach the features of sending physical address meta data including physical addresses of logical blocks of data and routing meta data comprising one or more node addresses between source and client sites?

FINDINGS OF FACT

1. The portion of the Abstract of the invention disclosure we reproduced in our invention statement as well as the first full paragraph of

the summary of the invention at page 3 of the Specification as filed both indicate that it was “conventional” in the art that the physical address location of data files was characterized in part using meta data. This is consistent with the Appellant’s assessment of the prior art beginning at page 1 through the top of page 3 of the Specification as filed. It is further indicated here that routable data networks utilize routable protocols to communicate data packets of information from node to node utilizing source and destination addresses within the packets. Refinements of the prior art included routing tables.

2. Paragraph [0052] of Vahalia teaches:

The term metadata refers to information about the data, and the term metadata is inclusive of file access information and file attributes. The file access information includes the locks upon the files or blocks of data in the files. The file attributes include pointers to where the data is stored in the cached disk array. The communication of metadata between the data movers 41, 42 is designated by the dotted line interconnection in FIGS. 1 to 4.

Prior art message blocks are shown in Figure 6 which is consistent with well-known Internet protocols.

Figure 5 illustrates the data flow of an access request and the Abstract teaches the following:

A client is permitted to send data access commands directly to network data storage of a network file server after obtaining a lock on at least a portion of the file and obtaining metadata indicating storage locations for the data in the data storage. For example, the client sends to the file server at least one request for access to a file. In response, the file server grants a lock to the client, and returns to the client metadata of the file including information specifying data storage locations in the network data storage for storing data of the file. . . .

3. Koyanagi's Publication utilizes conventional Internet protocols to provide a selective, efficient network for interconnecting terminal devices to optimize the flow of data between them as described in the Abstract. Several embodiments are depicted which begin with the broad characterization of a data transmission device 10 in Figure 1, which includes a routing table and a path selection unit. Figure 2 illustrates such a routing table. Figure 3 illustrates the referenced routing table to determine the next hop or next node. The embodiment in Figure 21 illustrates the use of routing tables and Figures 24A-24C relied upon by the Examiner further illustrate actual Internet and next hop/node addresses.

PRINCIPLES OF LAW

Section 103 forbids issuance of a patent when "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains."

KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 406 (2007).

In *KSR*, the Supreme Court emphasized "the need for caution in granting a patent based on the combination of elements found in the prior art," *id.* at 415, and discussed circumstances in which a patent might be determined to be obvious. *Id.* at 415-16 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 12 (1966)). The Court reaffirmed principles based on its precedent that "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *Id.* at 416. The operative question in this "functional approach" is

thus “whether the improvement is more than the predictable use of prior art elements according to their established functions.” *Id.* at 417.

The Federal Circuit has recognized that “[a]n obviousness determination is not the result of a rigid formula disassociate from the consideration of the facts of a case. Indeed, the common sense of those skilled in the art demonstrated why some combinations would have been obvious where others would not.” *Leapfrog Enters, Inc. v. Fisher-Prince Inc.*, 485 F.3d 1157, 1161 (Fed. Cir. 2007) (citing *KSR*, 550 U.S. at 416). The Federal Circuit relied in part on the fact that Leapfrog had presented no evidence that the inclusion of a reader in the combined device was “uniquely challenging or difficult for one of ordinary skill in the art” or “represented an unobvious step over the prior art.” *Id.* at 1162 (citing *KSR*, 550 U.S. at 418).

ANALYSIS

For the reasons generally set forth by the Examiner initially at pages 4 through 6 of the Answer, in addition to the Examiner’s more expansive reasoning of combinability set forth at pages 10 through 12 of the Answer, we affirm the rejection of representative independent claim 1 on appeal under 35 U.S.C. § 103. The Examiner’s reasoning of combinability of the respective teachings of Vahalia and Koyanagi are consistent with the earlier-noted case law.

Notwithstanding the fact that Vahalia teaches in Finding of Fact 2 the physical address meta data including physical addresses of logical blocks of data at a particular source site, Appellant’s approach to the disclosed invention as we noted in Finding of Fact 1 indicates that this was conventional or known in the art. To the extent the Brief argues that the

claimed routing meta data is not taught in Vahalia, the Examiner agrees since the basis of the rejection for this claimed feature is found in Koyanagi and not, as argued in the Brief, in Vahalia.

Both references relied upon by the Examiner teach the use of Internet protocols to communicate between so-called clients and source sites that are consistent with Appellant's recognition of prior art approaches in Finding of Fact 1. Basically, the Examiner's reasoning of combinability is based upon the accurate view that Vahalia does not detail the actual Internet protocol addressing techniques that were known in the art as also recognized by Appellant's recognition of the prior art in Finding of Fact 1. The details of such Internet protocols are exemplified independently from Appellant's admissions thereof in the significant teachings of Koyanagi to the extent of even utilizing routing tables with Internet addresses associated within them to optimize and make more efficient time wise the connectability of various sites within the use of traditional Internet protocols. What is not apparently taught in detail in Vahalia regarding inter nodal communications is taught in detail in Koyanagi. As such, a person of ordinary skill in the art obviously would have combined the respective teachings of Vahalia and Koyanagi within 35 U.S.C. § 103 notwithstanding Appellant's arguments to the contrary in Brief.

Appellant's specific arguments at page 17 of the Brief relating to independent claim 19 are misplaced. The existence of physical address meta data has been admitted by Appellant to be known in the art according to the approach taken by his own disclosure. Vahalia independently teaches this and the routing tables of Koyanagi provide memory mediums for a

corresponding data structure that includes routing meta data addresses as well.

The arguments at pages 17 and 18 of the Brief relating to the second stated rejection do not present any arguments before us that Vahalia, Koyanagi, and Kato are not properly combinable within 35 U.S.C. § 103. Likewise, Appellant does not contest what the Examiner relies upon in Kato.

Lastly, no Reply Brief has been filed contesting the Examiner's persuasive, responsive arguments in the Answer.

CONCLUSIONS OF LAW

Appellant has not shown that the Examiner erred in finding that the combination of teachings of Vahalia and Koyanagi teaches the claimed physical address meta data that includes physical addresses of logical blocks of information and, separately, routing meta data comprising nodal addresses.

DECISION

The Examiner's decision rejecting all claims on appeal, claims 1, 2, 4 through 6, 12, 13, 19, and 21 through 27 under 35 U.S.C. § 103 is affirmed. All claims on appeal are unpatentable over the prior art of record.

Appeal 2008-005949
Application 09/888,544

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

msc

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